Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1.-8. (Canceled)
- 9. (Previously Presented) A photochemical hole burning medium, comprising a material in which a rare earth complex and a reducing agent are dispersed in a solid matrix; wherein

the photochemical hole burning medium is used at low temperatures; and said rare earth complex is at least one complex selected from the group consisting of a europium (III) crown ether complex, a europium (III) polyether complex, and a europium (III) cryptand complex,

wherein said electron-donating composite compound is an organic tin compound represented by RSnSnR in which R is an alkyl group or an aryl group.

- 10.-18. (Canceled)
- 19. (Original) The photochemical hole burning medium set forth in claim 9, wherein said solid matrix is at least one glass-forming compound selected from the group consisting of silica, germanium oxide, boron oxide, phosphorus pentaoxide and tellurium oxide.
 - 20.-28. (Canceled)
- 29. (Original) The photochemical hole burning medium set forth in claim 19, wherein at least one compound selected from the group consisting of Al₂O₃, Ga₂O₃, In₂O₃, TiO₂, ZrO₂, Nb₂O₅ and Ta₂O₅ is contained in said solid matrix.
 - 30.-39. (Canceled)
- 40. (Original) The photochemical hole burning medium set forth in claim 9, wherein the reducing agent has an oxidation/reduction potential of not more than 1 V.

- 41. (Canceled)
- 42. (Canceled)